## Rethinking pi

Business

## ASSIGN B USTER

An interesting idea about Pi has been introduced that can make high school trigonometry less confusing. A circle is defined as " a closed plane curve consisting of all points at a given distance from a point within it called the center." Since the radius is used to define a circle, then I believe that the radius should be used to define the circle ratio; Pi should have been the ratio of the radius, rather than diameter, to the circumference (this way, the value of Pi would be doubled). A full circle, 360 degrees, would be Pi radians if the value of Pi were approximately 6.

28 instead of approximately 3.14 , so it makes more sense to me that the ratio associated with circles should be approximately 6. 28. Since people have been using Pi for a long time, replacing Pi would be too difficult. Instead of redefining Pi, mathematicians have proposed using the Greek letter Tau to represent two times Pi . This would make the concepts that we high school students learn in math class seem more natural and less confusing.

Pi divided by six is one twelfth of a circle, while Tau divided by twelve is one twelfth of a circle. By using Tau, there is less work needed to memorize the unit circle when taking trigonometry classes. There are other examples where using Tau instead of Pi is more useful. I was introduced to this idea by reading " The Tau Manifesto" by Michael Hartl. Although other works have been done on this subject, I wrote this to introduce more teenagers to the idea.

I encourage those who like this idea to read more about Tau, start using Tau more, and celebrate " Tau day" on June 28th.

